

## PROJECT DESCRIPTION

### I. GENERAL

This project involves the modification of an existing Traffic Control Signal at the intersection of MD 26 and MD 355 in Frederick County. The street lighting is existing. The existing Hazard Identification Beacon located approximately 1900' west of the intersection shall be interconnected with the signalized intersection. The H.I.B.'s sign and controller cabinet shall be replaced.

MD 26 is assumed to run in an east-west direction.

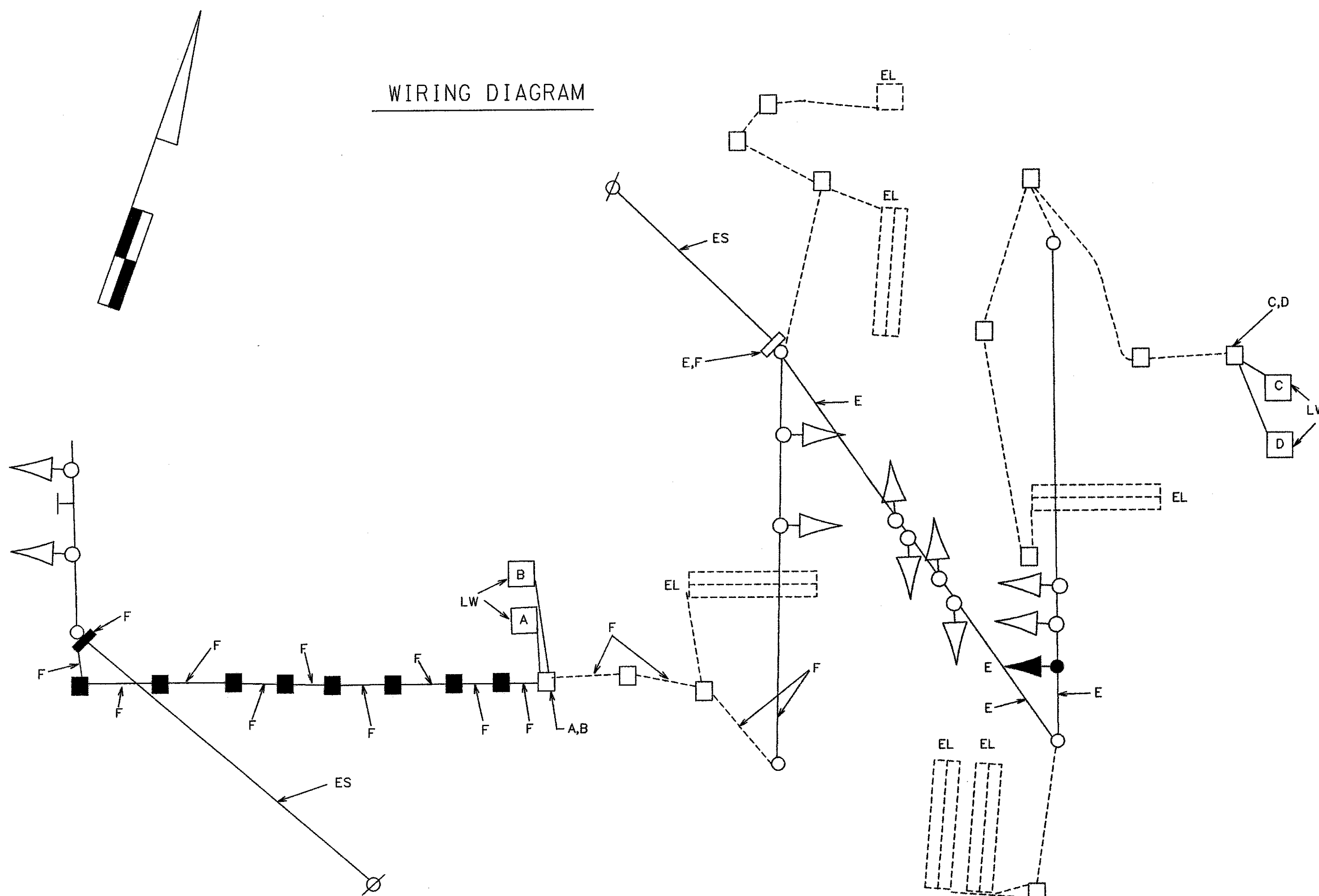
### II. INTERSECTION OPERATION

- The intersection operates in a NEMA four-phase, fully-actuated mode, with the MD 26 approaches running concurrently. The MD 355 approaches also run concurrently. The H.I.B. will flash when MD 26 has a yellow or red indication.
- The existing full-traffic-actuated, eight-phase controller housed in a NEMA size "5" pole-mounted cabinet shall be utilized at the intersection. The cabinet at the H.I.B. shall be changed over to a NEMA size "G" pole-mounted cabinet and controller.

### III. SPECIAL NOTES:

- Upon completion of this project, the Contractor shall notify Mr. Ed. Rodenhizer at (410) 787-7652 to arrange for the internal wiring of the existing intersection controller cabinet. The Contractor is to provide Mr. Rodenhizer with 48 hours advance notice and to have all the cables properly identified.

## WIRING DIAGRAM



### UTILITY LEGEND

— G —	G	GAS MAIN
— W —	W	WATER MAIN
— S —	S	SEWER MAIN
— E —	E	ELECTRIC CABLES
— A —	A	AERIAL CABLES
— T —	T	TELEPHONE CABLES

## EQUIPMENT LISTS

### A. EQUIPMENT TO BE SUPPLIED BY S.H.A. AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
9044	1 EA.	12", one-way, three-section (R,Y,G) traffic signal head having proper span wire hangers, balance adjusters and tunnel visors.
9000	1 EA.	NEMA size "G" pole-mounted cabinet and necessary equipment to interconnect H.I.B. to the intersection.
9089	50 S.F.	Flat sheet aluminum sign (yellow) to consist of: 1 EA. W3-3(2) "SIGNAL AHEAD PREPARE TO STOP WHEN FLASHING" sign (5' x 10') mast arm mounted
1 EA.		Bottom plate for NEMA size "5" pole mounted cabinet.

### B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

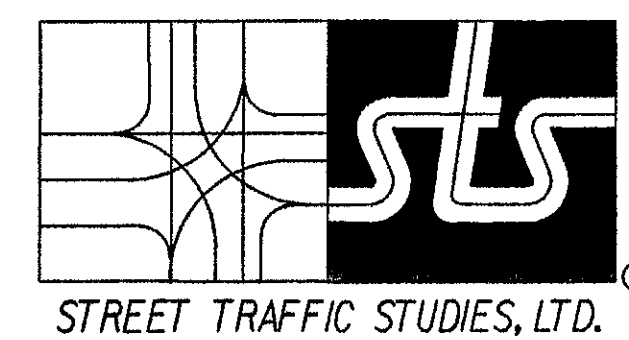
ITEM NO.	QUANTITY	DESCRIPTION
1001	L.S.	Maintenance of traffic.
8011	1 EA.	Install traffic signal heads.
8019	1 EA.	Install pole-mounted cabinet and controller.
8021	190 L.F.	Furnish and install sawcut.
8022	35 L.F.	Furnish and install 1" galvanized steel electrical conduit (detector wire sleeve).
8024	1475 L.F.	Furnish and install 2" polyvinyl chloride electrical conduit (Schedule 80) (trenched).
8033	8 EA.	Furnish and install handhole (frame and cover).
8039	2300 L.F.	Furnish and install 12 pair communication cable jellyfilled, underground.
8040	550 L.F.	Furnish and install loop wire (No. 14 A.W.G.) encased in 1/4" flexible tubing.
8044	300 L.F.	Furnish and install 5-conductor electrical cable (No. 14 A.W.G.).
8054	50 S.F.	Install overhead mounted sheet aluminum sign.
8065	1 EA.	Furnish and install bend into an existing base.
NEG.	1 EA.	Removal of existing flasher cabinet.
NEG.	1 EA.	2" blind coupling.
NEG.	1 EA.	2" LB.

### WIRING KEY

A	}	SPlice PROPOSED LOOP WIRE INTO THE EXISTING 2- CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) (ALUMINUM SHIELDED)
B		
C		
D		
E	—	5- CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
F	—	12 PAIR COMMUNICATION CABLE (UNDERGROUND)
LW	—	LOOP WIRE
EL	—	EXISTING LOOP WIRE
ES	—	EXISTING OVERHEAD SERVICE BY ALLEGHANY POWER

### PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11
	(Y)	(Y)	(R)	(R)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)
PHASE 2 & 6	DARK	DARK	G	G	G	G	G	R	R	R	R
2 & 6 CHANGE	FL/Y	FL/Y	Y	Y	Y	Y	Y	R	R	R	R
PHASE 4 & 8	FL/Y	FL/Y	R	R	R	R	R	G	G	G	G
4 & 8 CHANGE	FL/Y	FL/Y	R	R	R	R	R	Y	Y	Y	Y
FLASHING OPERATION	DARK	DARK	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R



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Task 3204.DGN

### REVISIONS


### APPROVALS

ASST. CHIEF TRAFFIC SECTION
ASST. DISTRICT ENGINEER, TRAFFIC
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
DIRECTOR, TRAFFIC & SAFETY



MD 26 and MD 355  
GENERAL INFORMATION

DRAWN BY: Milesky	COUNTY: FREDERICK	TS NO. 1424	SHEET NO. 2 OF 2
CHECK BY: EMM	LOG MILE: 10002600.53	F.A.P. NO. AC-STPG-000S(59)E	T.I.M.S. NO. C-976
DATE: APRIL 21, 1999	S.H.A. NO. AW260 A5T/853		
SCALE: N/A			